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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/459,260	12/10/1999	EDWARD MARGOSCIN	5053-30700	9934

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ERIC B MEYERTONS
CONLEY ROSE & TAYON PC
PO BOX 398
AUSTIN, TX 787670398

EXAMINER	
PATEL, JAGDISH	

ART UNIT	PAPER NUMBER
3624	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/459,260	MARGOSCIN ET AL.	
	Examiner	Art Unit	
	JAGDISH PATEL	3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 July 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *36-75* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *36-75* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/15/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to amendment filed 7/8/04 (Request for Continued Examination Request under 37 CFR §1.114 and accompanied Information Disclosure Statement).

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 7/8/04 (received 7/15/04) was filed after the mailing date of the final rejection on 4/6/04. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/15/04 has been entered. However, since the applicant's filing does not include response to the prior office action, this paper

only concerns the consideration of the IDS filed as stated previously.

Response to Amendment

2. Not applicable. No amendment response has been filed responsive to the final rejection mailed 4/6/2004.

Statute Cited in Prior Action

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments and Claim Analysis

The examiner has reproduced response to arguments and claim rejections as previously presented in final office action mailed 4/6/2004.

Response to Arguments

4. The applicant's arguments regarding claims being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as invention are not persuasive because the amended claims contain defects which

render them indefinite as further explained in the following paragraphs. In response to the applicant's argument that the claim language must be analyzed in light of the content of particular application disclosure, the examiner points out that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The analysis of claims, therefore, is predicated upon the scope of the claimed invention without reading the specification into the claim and claim interpretation given by one possessing the ordinary skill in the pertinent art at the time of the invention.

Claim 36 as amended is defective because the limitation "wherein the interface program is configured to receive data from the channel and a command that will initiate a business transaction" is indefinite since it does not specify whether the interface program is also configured to receive the command that will initiate a business transaction. Furthermore, the claim fails to ascertain the relationship of the command that initiates a business transaction has with any other element of the claimed invention.

Claim 51: The applicant merely states that a person possessing the ordinary skill in the pertinent art would have

reasonable notice as scope of the claim. However, the 112(second) rejection concerns the indefiniteness arising due to lack of relationship amongst the process steps (gap between the steps). For example, the claim recites limitation "determining whether a portion of received data includes values in a list of allowable value", which has no connection to any other step of the claim. Likewise, the limitation "wherein each interface program is communicably coupled to one of a plurality of channels" does not relate to any subsequent steps of the claim. The limitation "flattening the data" is performed without any relation to the determining step. The limitation "wherein the program instructions comprise a plurality of objects" is irrelevant to any of the process steps of the claim.

It is asserted one of ordinary skill in the would not be able to ascertain what the scope of the invention is given the aforementioned deficiencies present in the claim.

Regarding claim 61, the applicant's amendment has not resolved the defect outlined in the previous office action.

As noted previously, the determining step does not affect does not affect the transforming data step and therefore also the transferring and processing steps. In other words, the transforming, the transferring and the processing steps are carried out regardless of the determining step.

The applicant's argument that the domain file in the middleware provides a substantial advantage over having a domain file in the interface program. However, the it is this argument is not relevant because claim 36 fails to positively recite location of the domain file. Claim 36 as amended recites "a domain file accessible by the middleware program" and "middleware program determines whether portions of the received data include allowable values based on the domain file". In this regard, the functionality of determining the allowable values is performed by the middleware program. As pointed out in the previous office action mere shifting the location of the functionality of determining the allowable value from the interface program (per Thorne) to the context manager would only involve a routine skill in the art since it amounts to rearranging parts of the combined inventions and that one of ordinary skill in the art would have recognized benefits of having the determining whether portions of the received data include allowable values based on the domain file performed at the middleware program.

Based upon the foregoing reasoning the applicant's arguments concerning 103 rejection of claims 36-70 are not persuasive and accordingly the claim rejections are maintained as previously stated.

Claim Rejections - 35 USC § 101

6. Claims 71 and 72 are rejected under 35 U.S.C. §101 because the claimed invention is directed to a non statutory subject matter.

35 U.S.C. §101 requires that in order to be patentable the invention must be a "new and useful process, machine, manufacture or composition of matter or new and useful improvement thereof" (emphasis added). Applicant's claims mentioned above are intended to embrace or overlap two different statutory classes of invention as set forth in 35 U.S.C. §101. Independent claim 36 upon which claims 71 and 72 depend is a system claims; however both claims 71 and 72 recite limitation of a method claim (determining and placing) (see rejection of claims under 35 U.S.C. §112, second paragraph, for specific details regarding this issue). "a claim of this type is precluded by express language of 35 U.S.C. §101 which is drafted so as to set forth statutory the statutory classes of invention in the alternative only", Ex parte Lyell (17USPQ2d 1548).

Claim Rejections - 35 USC § 112

7. Claims 36-75 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 36-50 and 71-72 as amended is defective because the limitation "wherein the interface program is configured to receive data from the channel and a command that will initiate a

business transaction" is indefinite since it does not specify whether the interface program is also configured to receive the command that will initiate a business transaction. Furthermore, the claim fails to ascertain the relationship of the command that initiates a business transaction has with any other element of the claimed invention.

The above analysis also applies to all dependent claims.

Claims 71 and 72 are not sufficiently precise due to the combining of two different statutory classes of invention in a single claim. Refer to rejection of these claims under 35 USC 101 for further details.

Claims 51-60 and 73-74 : The applicant merely states that a person possessing the ordinary skill in the pertinent art would have reasonable notice as scope of the claim. However, the 112(second) rejection concerns the indefiniteness arising due to lack of relationship amongst the process steps (gap between the steps). For example, the claim recites limitation "determining whether a portion of received data includes values in a list of allowable values", which has no connection to any other step of the claim. Likewise, the limitation "wherein each interface program is communicably coupled to one of a plurality of channels" does not relate to any subsequent steps of the claim.

The limitation "flattening the data" is performed without any relation to the determining step. The limitation "wherein the program instructions comprise a plurality of objects" is irrelevant to any of the process steps of the claim.

It is asserted one of ordinary skill in the would not be able to ascertain what the scope of the invention is given the aforementioned deficiencies present in the claim.

Claims 61-70 and 75: As noted previously, the determining step does not affect the transforming data step and therefore also the transferring and processing steps. In other words, the "transforming", the "transferring" and the "processing steps" are carried out regardless of the determining step. Independent claim 61 recites limitation determining whether a portion of received data includes values in a list of allowable values". However, the outcome of the determination has no relationship to the any limitation(s) that follows. In other words, the determining step does not affect the transforming data step and therefore also do not affect the transferring and processing steps. In absence of one or more steps that relate the determining step to the aforementioned other steps the claim 61 as a whole and associated dependent claims 62-70 and 75 are rendered indefinite.

Claim Rejections - 35 USC § 103

8. Claims 36-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonough et al. (US Pat. 6,115,693) and further in view of Thorne (US Pat. 6,100,891).

Examiner's note: the following definition of CORBA architecture is extracted from web site http://www.trinity.edu/~rjensen/245glosf.htm#CORBA and provided for convenience of the applicant, since many features recited in the claims are facilitated by CORBA which is the platform used in the McDonough reference.

CORBA= Common Object Request Broker Architecture is in competition with Microsoft's OLE/DCOM object-oriented Middleware technology for business applications. CORBA is most popular in communications Middleware using an Object Request Broker ORB. CORBA evolved out of TCP/IP. DCOM is bundled with the Windows 2000 operating system but has lackluster support for other operating systems. CORBA is more flexible with other operating systems. Both CORBA and OLE/DCOM are designed to distribute objects or assembly of applications from discreet, self-contained components. Both are appealing in the fast growing technology of "object middleware." Object middleware has corporate appeal due to the ability to provide highly abstracted object-oriented programming interfaces. Microsoft added new terminology in this area. For example, COM depicts a Component Object Model to describe the base model used for building components. The term DCOM is the Distributed form of COM. ActiveX (formerly OCX) is the packaging technology for controls and supercedes prior Visual Basic Controls known as VBX. OLE no longer means object linking and embedding. OLE now refers to a

collection of technologies. For interactive computing on the web, see Distributed Network Computing. A good textbook chapter on CORBA is given at http://ei.cs.vt.edu/~wwwbtb/fall.96/book/chap20/index.html. Also see RPC and http://www.trinity.edu/rjensen/260wp/260wp.htm#ODBC.

Claim 36: McDonough teaches a system comprising:

a server configured to process business transactions (servers operated by Content providers, Fig. 4 and L 426, …434, col. 8 L 61-67);

a middleware program communicatively coupled to the server (context manager 402, Fig. 4 and col. 8 L 51- 60, which provides management of the information);

a channel communicatively coupled to the middleware program and to the server (channel is shown as customer contact access methods and shown in Fig. 4 as kiosk 424, call center 422, phone 420 etc.); and

an interface program communicatively coupled to the channel and to the middleware program, wherein the interface program is configured to receive data and a command that will initiate. a business transaction (the context manager also performs functions of the interface program as described in col. 8 L 51-67, management capability for multiple customer access resources which share common business processes);

wherein the interface program receives data from the channel and transmits the data to the middleware program (refer to middleware CORBA as discussed in col. 9 L 25-30, also refer to description of the context manager discussed in analysis of above steps).

McDonough, while teaches the system substantially as claimed, fails to explicitly, recite a domain file comprising a list of allowable values associated with one or more business transactions and that the middleware program determines whether portions of the received data include allowable values based on the domain file validates portions of the data, transforms the data into a form required by the server, and transmits the transformed data to the server.

Thorne, in the same field of endeavor, however, teaches a system for application of data communication and data conversion and validation which comprises a domain file comprising a list of allowable values associated with a business transaction (col. 6 L 17-30)and further suggests determining whether the portion of the data include allowable values based on a domain files (list of allowable values .. or establishing a database).

Thorne discloses the determining of allowable values associated with business transaction is performed by the interface program. The claimed invention requires that the determining step is performed by the middleware (i.e. context manager of McDonough). However, it has been held that rearranging parts of an inventions involves only routine skill in the art. In re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950). In this instance, rearranging the location of performing determination of the allowable values from the interface program to the middleware program would involve only routine skill in the art per the court ruling.

In view of the teaching of Thorne and further in view of In re Japiske as discussed above, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement the aforementioned feature in

the middleware because the invention would perform regardless of where the stated function is performed whether in the interface (as per Thorne) or if modified to incorporate into the middleware (the context manager)of McDonough.

It would have been obvious to one of ordinary skill in the art at the time of invention to implement the domain file comprising a list of allowable values into the context manager and determining allowability of the data based on the domain file (validation of input data) as suggested by Thorne to McDonough because validation of input data would provide conformity to the format requirements and limits imposed by the server to facilitate further processing of the data by the server.

Claims 37. wherein the middleware program receives a result from the business transaction server and transfers the result to the interface program (Fig. 4 context manager, 402).

Claim 38-41. wherein the channel comprises a kiosk (a computer terminal, a call center, a an electronic data transfer system (refer to customer access methods shown in Fig. 1 and Fig. 4 heterogeneous systems 406).

Claim 42-43 . wherein a local area network (wide area network) communicatively couples the channel to the server (Fig. 4 LAN/WAN).

Claim 44. wherein the portions of the domain file may be changed without changing code of the middleware program (col. 9 L 25-30, a feature of the CORBA used for distributed computing and object messaging).

Claims 45 wherein the middleware program generates an error code if the portions of the received data include values that are not allowable values (inherent feature of context manager because as described in col. 9 L 52-62 as the Quality Center which performs reporting 508, messaging and trouble shooting 512).

Claim 46 wherein the domain file comprises at least one serialized file generated by the domain manager (inherent feature of the CORBA used for distributed computing and object messaging)

Claim 47. wherein the middleware program transfers data to a plurality of business transaction servers during the processing of a business transaction (refer to Fig. 4, context Manager 402, transfers data to a plurality of transaction servers 404).

Claim 48. wherein the middleware program comprises computer code written in an object-oriented programming language (col. 9 L 25-30, CORBA, features of openness and functionality).

Claim 49. wherein the middleware program is extendable without altering source code of the middleware program ((col. 9 L 25-30, CORBA, inherent to the architecture) .

Claims 50. wherein an extension to the middleware program comprises computer code that is stored in a package and run when the middleware program runs((col. 9 L 25-30, CORBA, inherent to the architecture) .

Claims 51-60. All limitations of claims 51-60 have been analyzed as in claims 36-50. Note that flattening data is inherent part of formatting and data communication among different devices.

Claims 61-70. All limitations of claims 61-70 have been analyzed as in claims 36-50.

Conclusion

4. This is a continuation of applicant's earlier Application No. 09/459,250. All claims are drawn to the same invention presented in the earlier amendment and have been finally rejected on the grounds and art of record as presented in the previous office action. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated

from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAGDISH PATEL whose telephone number is (703)308-7837. The examiner can normally be reached on 800AM-600PM M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on (703)308-1065. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jagdish N. Patel
(Primary Examiner, AU 3624)
9/1/04